HG166 Web Configuration Guide

Ver. 1.0.0

Aug. 2008.

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The specifications and information regarding the products in this manual are subject to change without notice.

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User Login

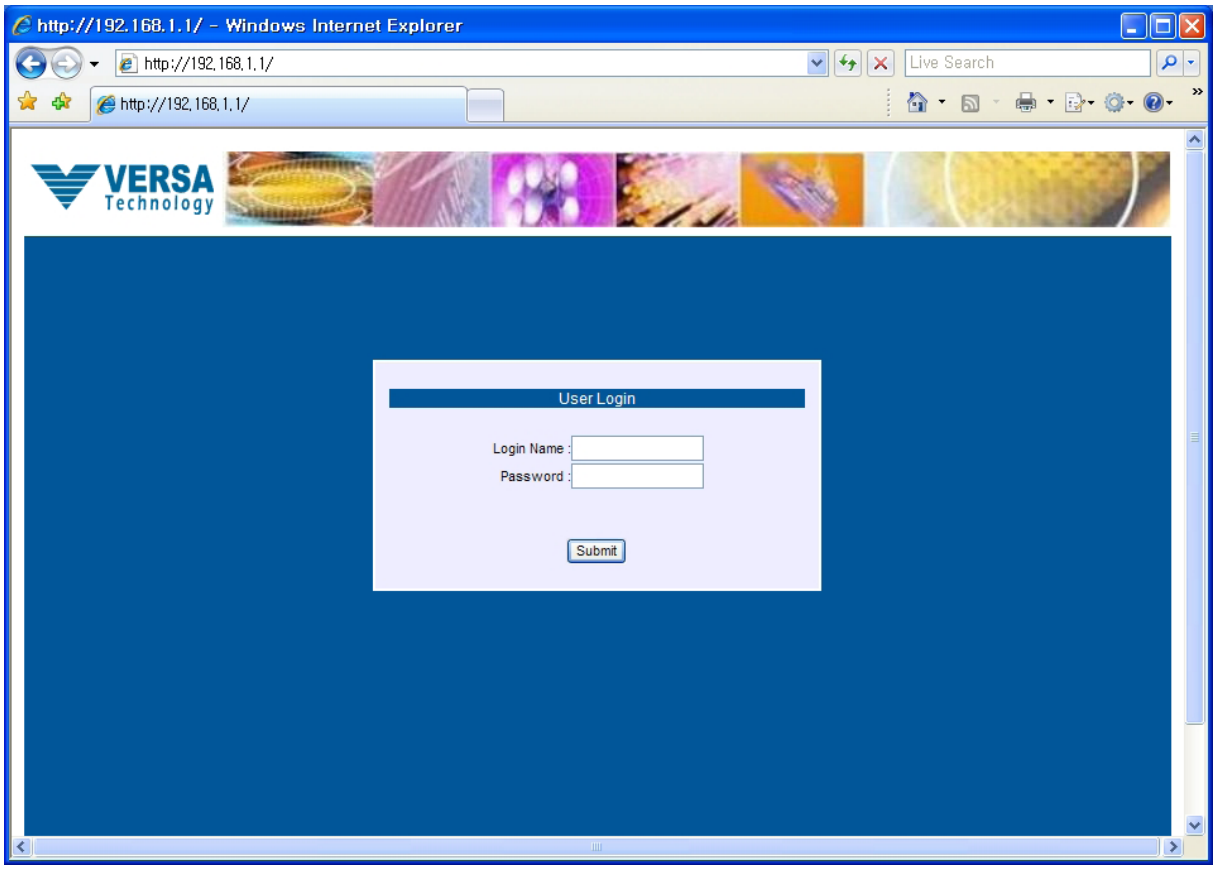


Figure 1 User Login

1. Open a web browser and type http://192.168.1.1 in the web browser's address field, as shown in Figure 1. Then press enter.
2. A webpage will popup asking you for your User name and Password (see Figure 1). Enter the default user name, 'root' and the default password, 'root', then click the OK button.

Status

└ Network Status ► Network Status

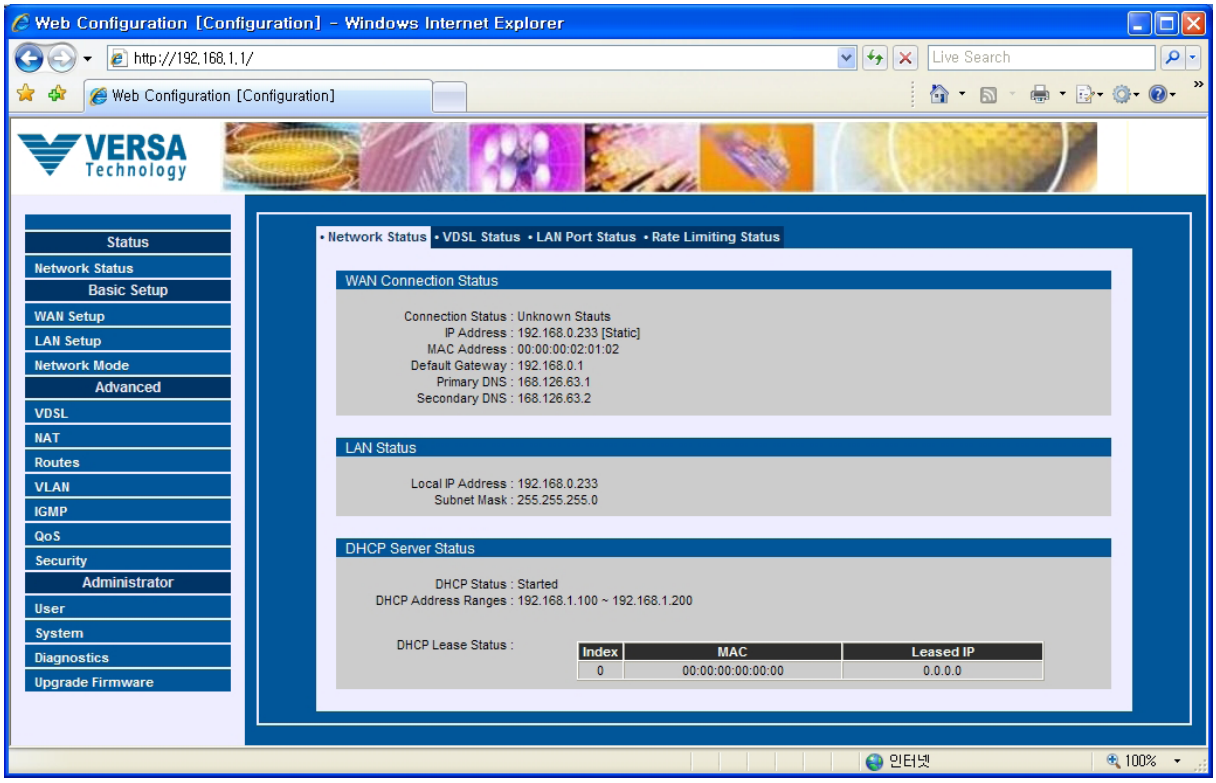


Figure 2 Network Status

Network status provides information for WAN port, LAN ports and DHCP server.

WAN Connection Status	:	This provides status information about WAN Connection like VDSL status and so on.
LAN Status	:	This provides status information about LAN connections.
DHCP Server Status	:	This provides status information about DHCP Server and current lease status.

Status

└ Network Status ► VDSL Status

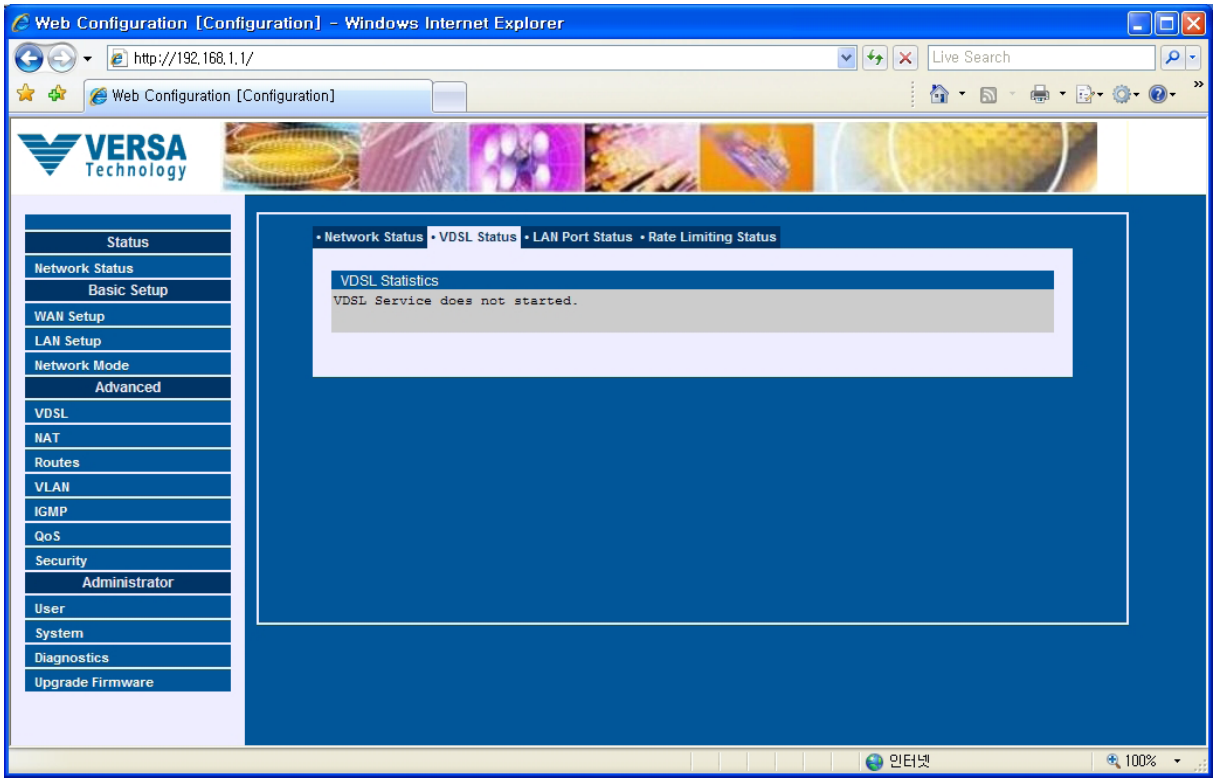
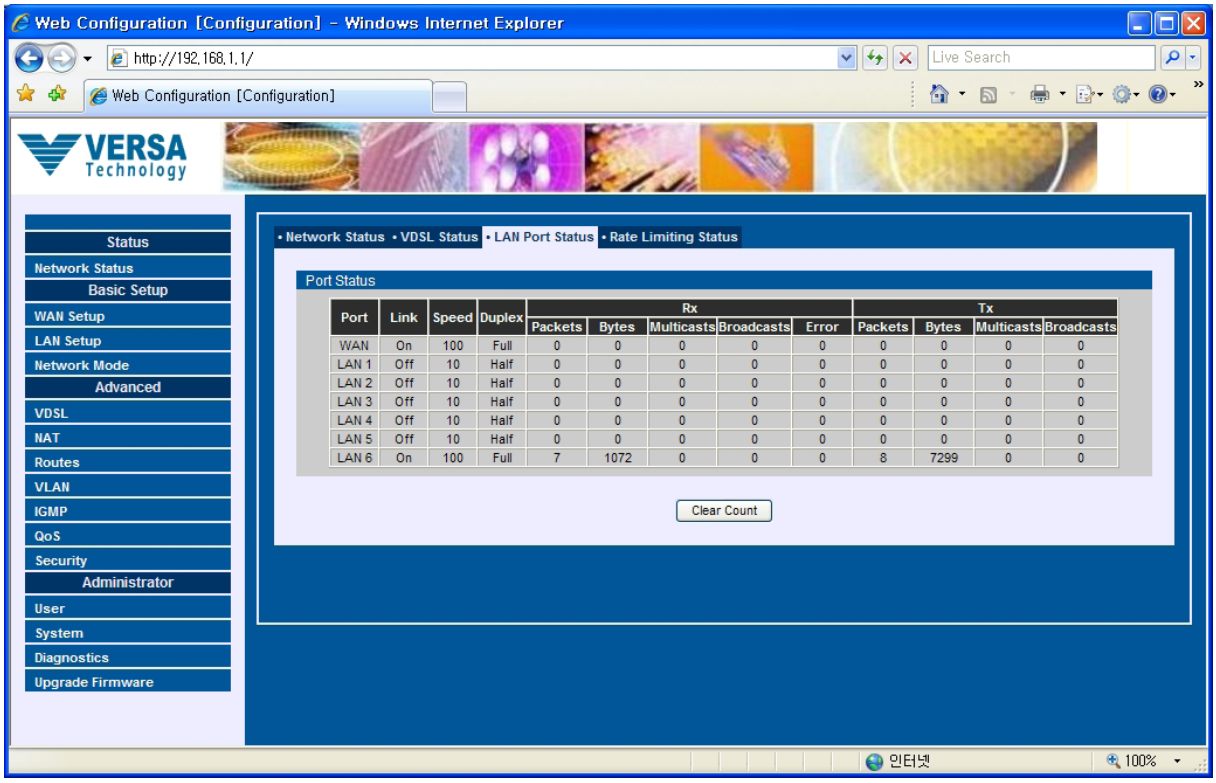


Figure 3 VDSL Status

This window provides current VDSL status information.

Status

└Network Status ► LAN Port Status


Web Configuration [Configuration] - Windows Internet Explorer
http://192.168.1.1/
Live Search
Web Configuration [Configuration]
VERSA Technology
Status
Network Status
Basic Setup
WAN Setup
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System
Diagnostics
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• Network Status • VDSL Status • LAN Port Status • Rate Limiting Status
Port Status
Port Link Speed Duplex Rx Packets Rx Bytes Rx Multicasts Rx Broadcasts Rx Error Tx Packets Tx Bytes Tx Multicasts Tx Broadcasts
WAN On 100 Full 0 0 0 0 0 0 0 0 0
LAN 1 Off 10 Half 0 0 0 0 0 0 0 0 0
LAN 2 Off 10 Half 0 0 0 0 0 0 0 0 0
LAN 3 Off 10 Half 0 0 0 0 0 0 0 0 0
LAN 4 Off 10 Half 0 0 0 0 0 0 0 0 0
LAN 5 Off 10 Half 0 0 0 0 0 0 0 0 0
LAN 6 On 100 Full 7 1072 0 0 0 8 7299 0 0
Clear Count
인터넷
100%

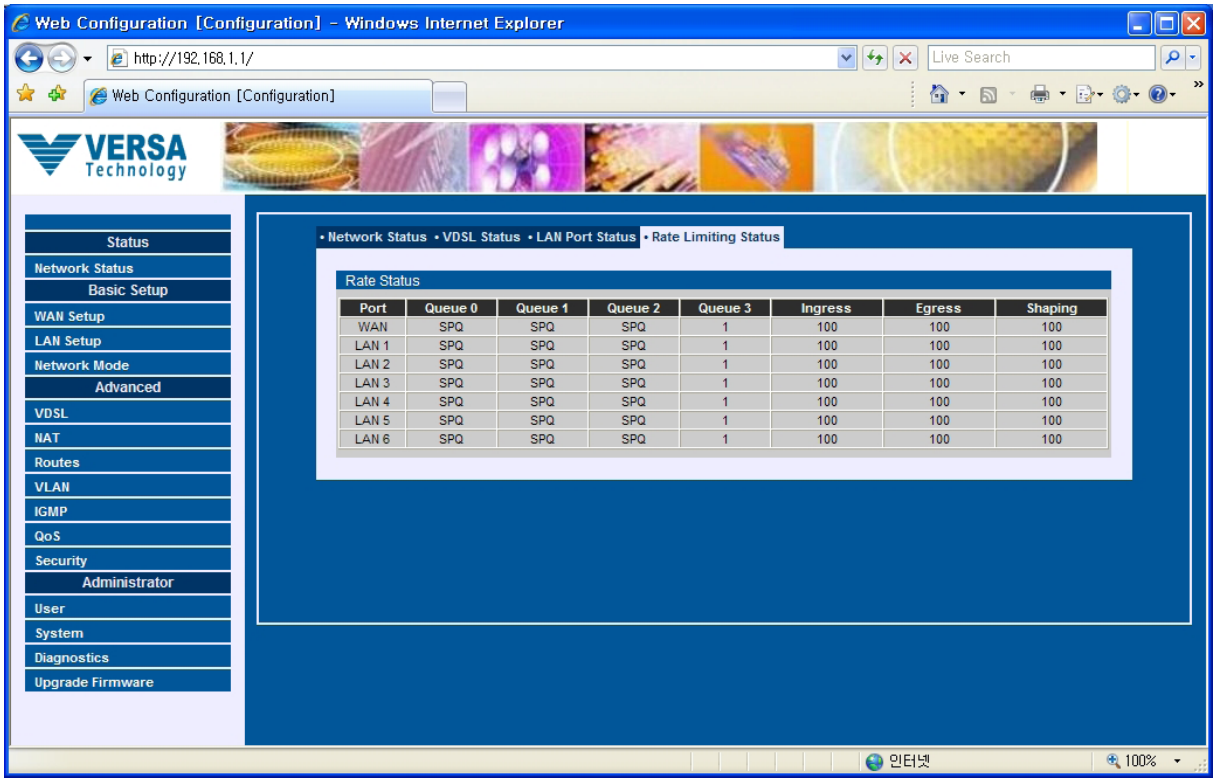
Figure 4 LAN Port Status

This window provides Port status information and statistics.

When user click ‘Clear Count’ button, statistics data will be cleared.

Status

└Network Status ► Rate Limiting Status


Web Configuration [Configuration] - Windows Internet Explorer
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NAT
Routes
VLAN
IGMP
QoS
Security
Administrator
User
System
Diagnostics
Upgrade Firmware
• Network Status • VDSL Status • LAN Port Status • Rate Limiting Status
Rate Status
Port | Queue 0 | Queue 1 | Queue 2 | Queue 3 | Ingress | Egress | Shaping
WAN | SPQ | SPQ | SPQ | 1 | 100 | 100 | 100
LAN 1 | SPQ | SPQ | SPQ | 1 | 100 | 100 | 100
LAN 2 | SPQ | SPQ | SPQ | 1 | 100 | 100 | 100
LAN 3 | SPQ | SPQ | SPQ | 1 | 100 | 100 | 100
LAN 4 | SPQ | SPQ | SPQ | 1 | 100 | 100 | 100
LAN 5 | SPQ | SPQ | SPQ | 1 | 100 | 100 | 100
LAN 6 | SPQ | SPQ | SPQ | 1 | 100 | 100 | 100
인터넷
100%

Figure 5 Rate Limiting Status

This window provides the rate limiting information for each port.

Basic Setup

└ WAN Setup

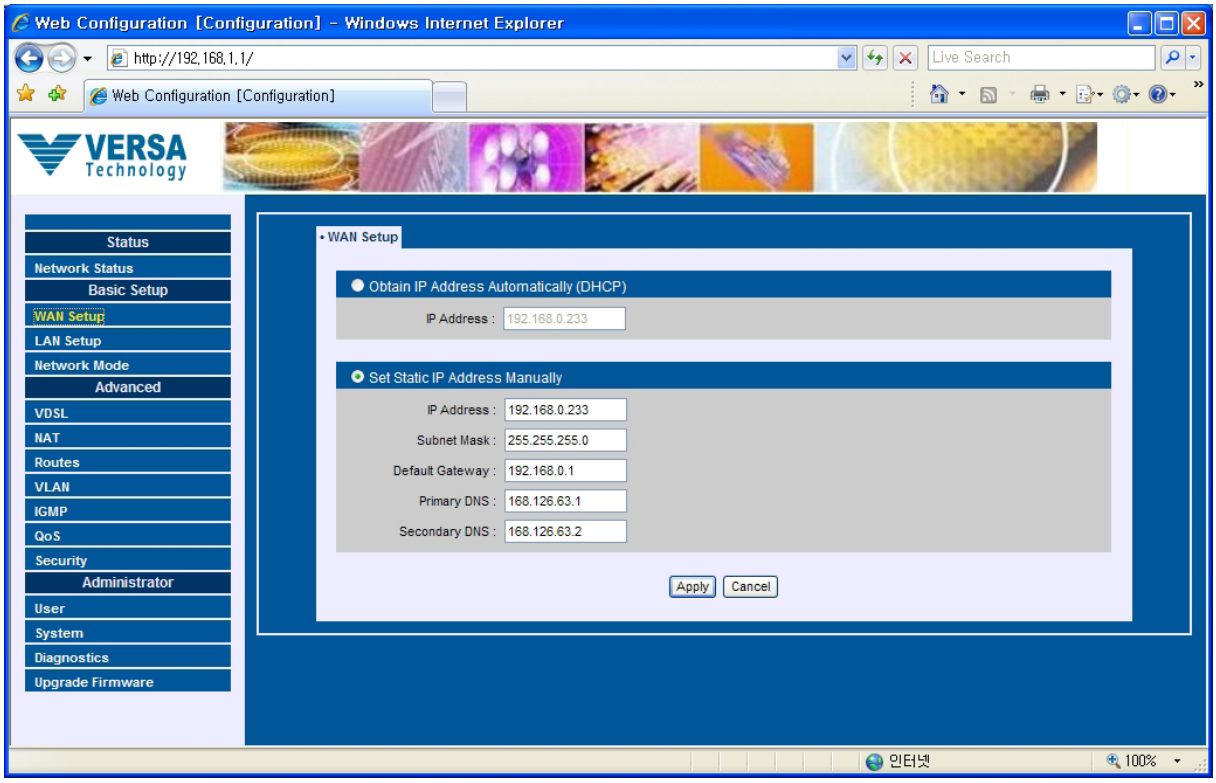

Figure 6 WAN Setup

This window provides WAN setup.

If you want to get IP address from DHCP server, perform the following steps:

- Select “Obtain IP Address Automatically (DHCP)” button.
- Click the “Apply” button.

If you want to set a static IP address, perform the following steps:

- Select “Set Static IP Address Manually” button.
- Enter the IP Address, Subnet Mask, and Default Gateway.
- Enter the DNS in the Primary DNS and/or Secondary DNS fields. You need to enter at least one DNS address.
- Click the “Apply” button.

Basic Setup

└ LAN Setup ► Local Network

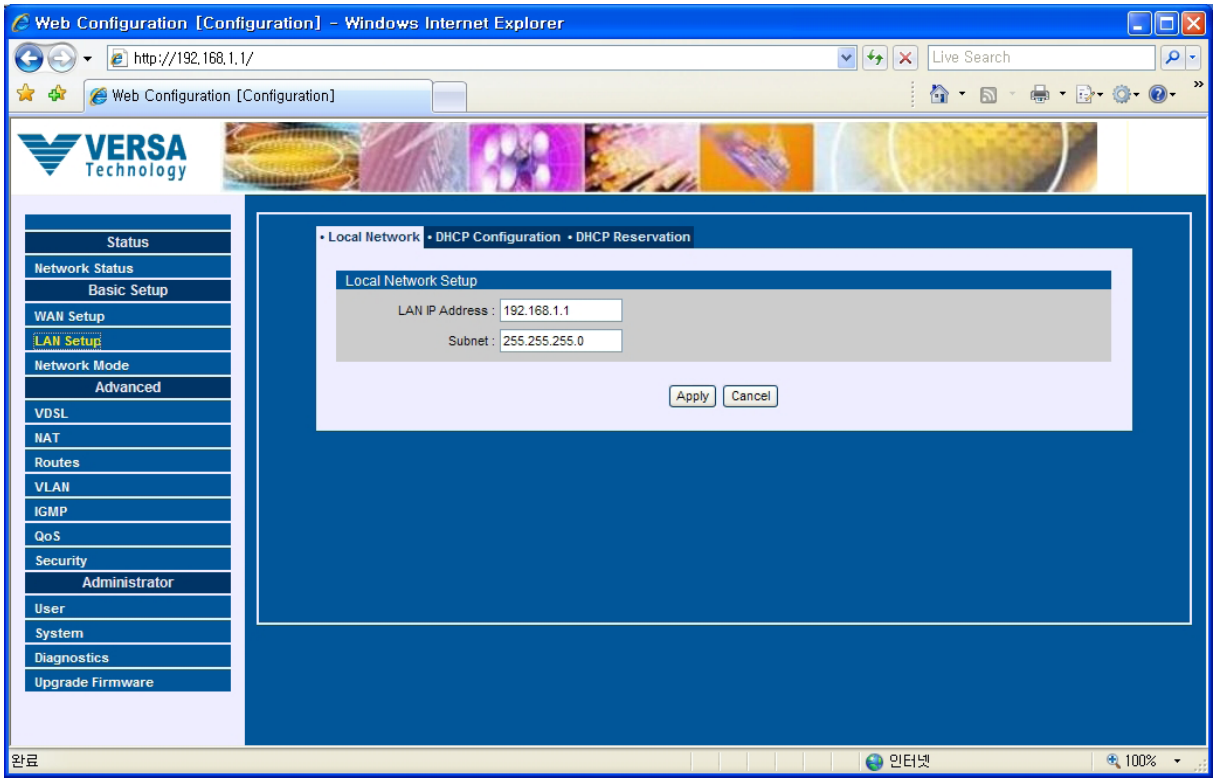

Figure 7 LAN Setup

This window provides LAN setup.

If you want to set local network IP address, perform the following steps:

- Enter the IP Address and Subnet Mask.
- Click the “Apply” button.

Basic Setup

└ LAN Setup ► DHCP Configuration

This window provides DHCP setup.
As this function, you can use DHCP server or DHCP relay.

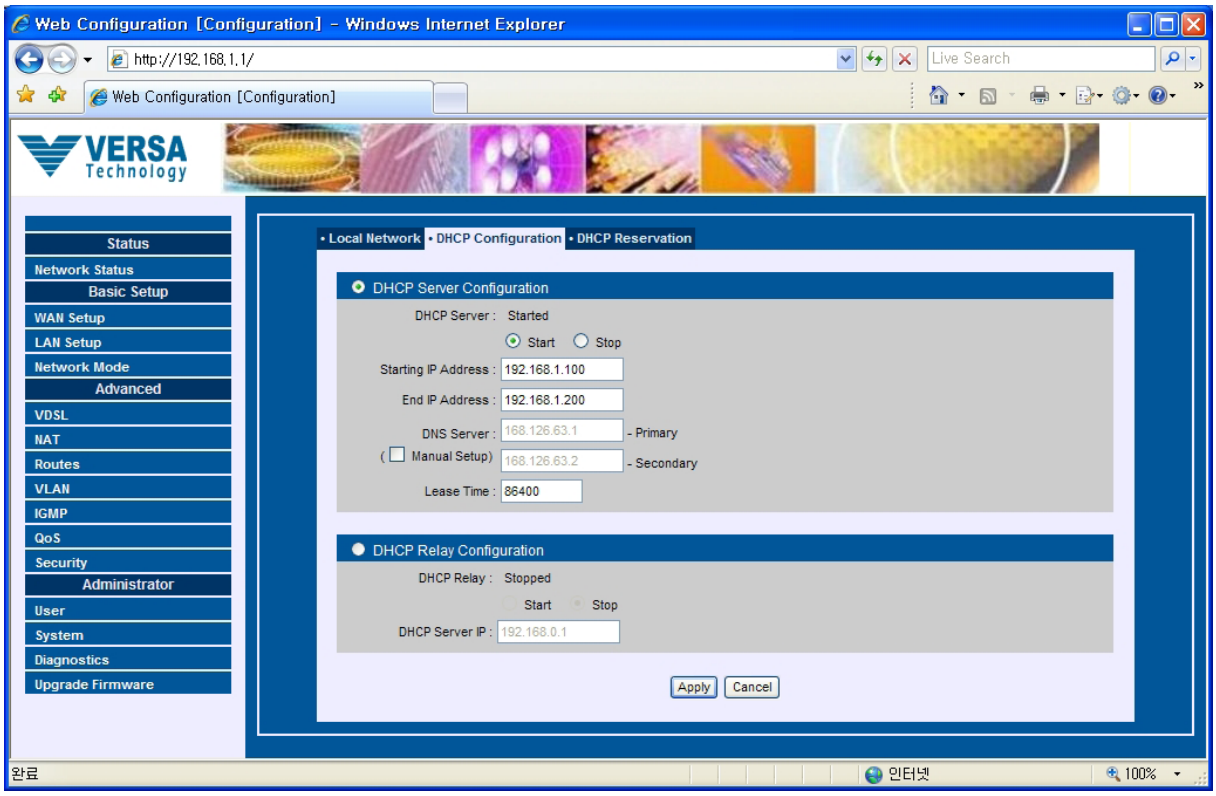

Figure 8 DHCP Setup

If you want to use DHCP server, perform the following steps:

- Select “DHCP Server Configuration” button.
- Select “Start” or “Stop” button.
- Enter the starting IP Address and the end IP Address.
- Device will use DNS server IP address that is specified on WAN setup.
  If you want to set manually, check “Manual Setup” check box and enter DNS Server IP Address at DNS Server fields.
- Enter Lease Time.
- Click the “Apply” button.

If you want to use DHCP relay, perform the following steps:

- Select “DHCP Relay Configuration” button.
- Select “Start” or “Stop” button.
- Enter the DHCP Server IP Address for DHCP relay.
  DHCP packet will be relayed to the DHCP Server.
- Click the “Apply” button.

Basic Setup

└ LAN Setup ► DHCP Reservation

This window provides DHCP reservation.

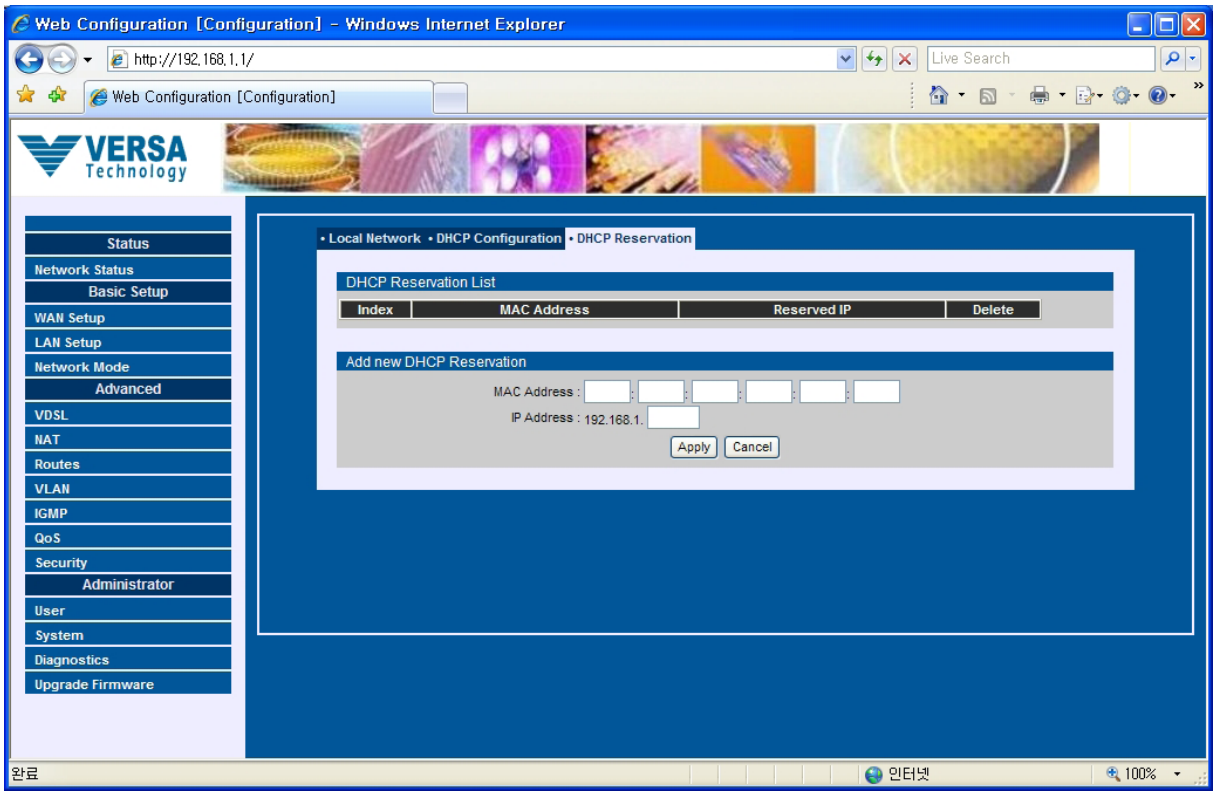

Figure 9 DHCP Reservation

If you want to reserve specific IP Address for PC, perform the following steps:

- Enter MAC Address for target PC.
- Enter IP Address to reserve.
- Click the “Apply” button.

Basic Setup

└ Network Mode

This window provides Network start mode setup. You can set network start mode to Layer 2 or Layer 3 in this page.

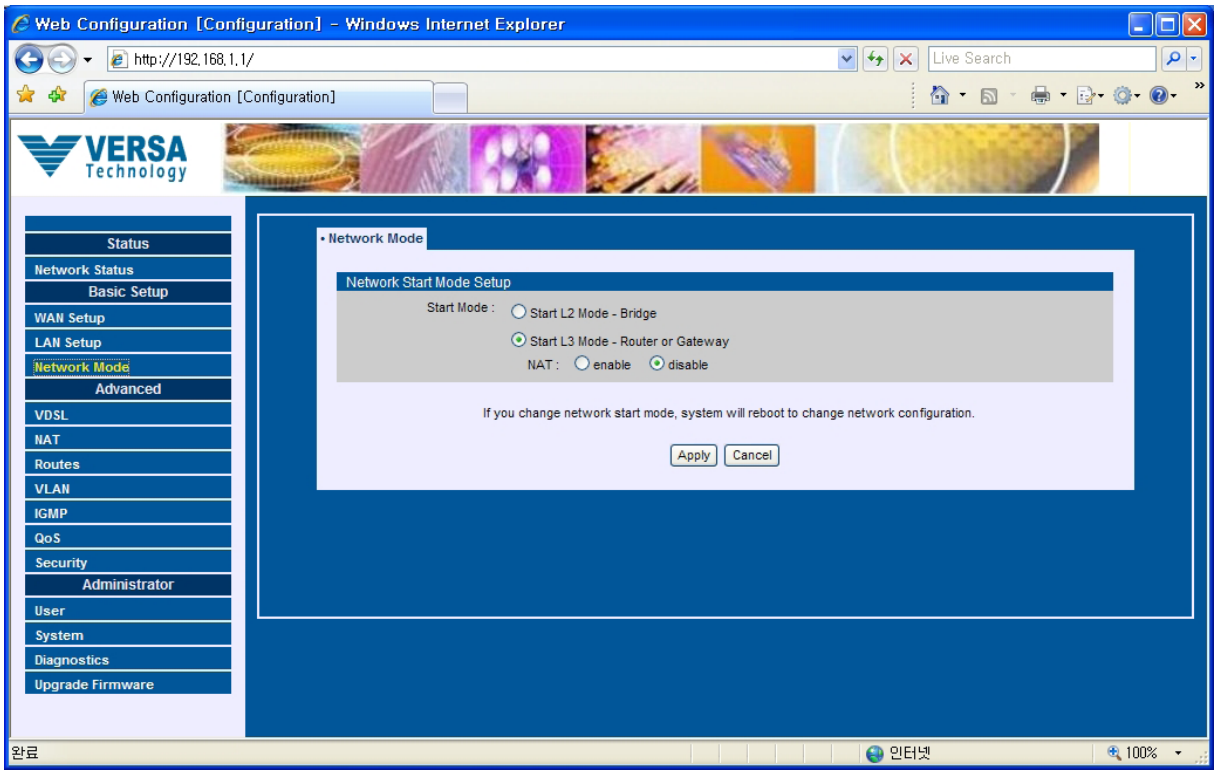

Figure 10 Network Mode

If you want to set the device for working to bridge, select L2 mode button. If you want to set the device for working to router or gateway, select L3 mode button.

In L3 mode, you can also set the NAT (Network Address Translation) mode using the enable and disable button.

If you change network start mode, it will reboot.

Advanced

└VDSL ► Configure VDSL

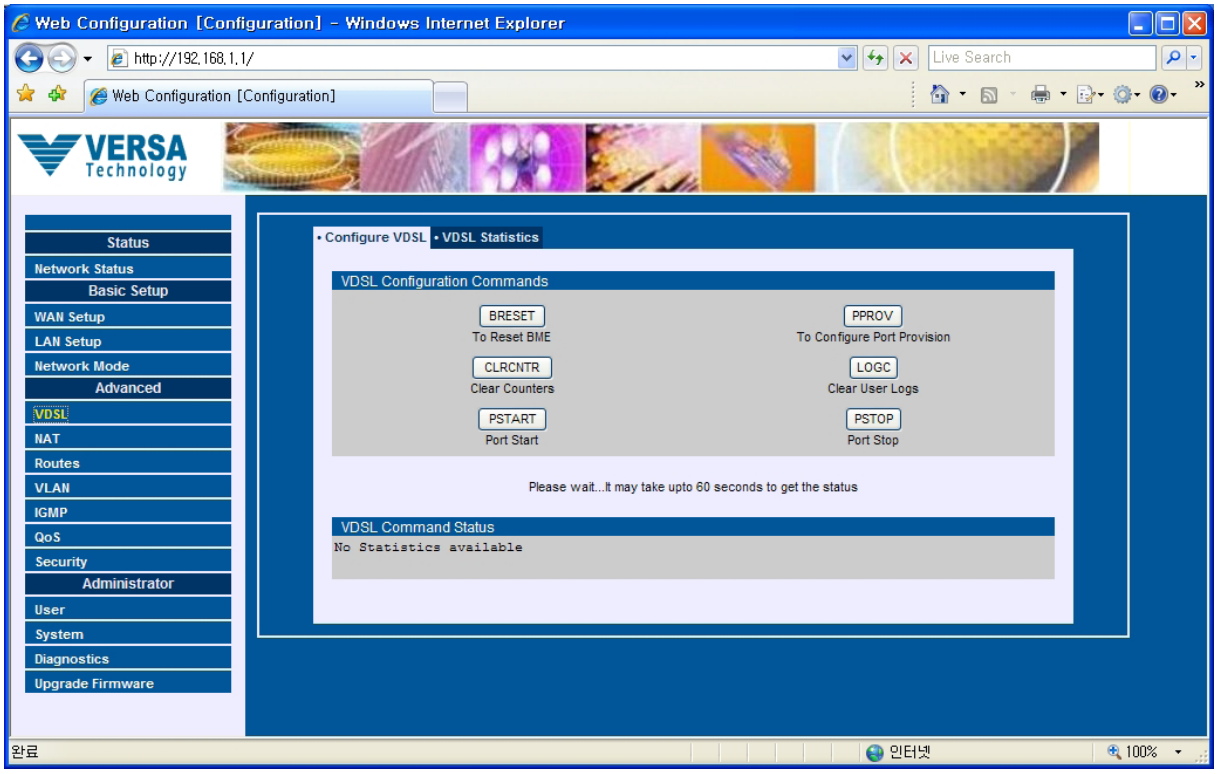

Figure 11 VDSL Configuration

This window provides VDSL configuration. You can see the result of configuration actions in “VDLS Command Status” box.

- BRESET : Reset BME(Burst Mode Engine)
- PPROV : Configure port provision
- CLRCNTR : Clear performance counters
- LOGC : Clear user logs
- PSTART : Port start
- PSTOP : Port stop

Advanced

└VDSL ► VDSL Statistics

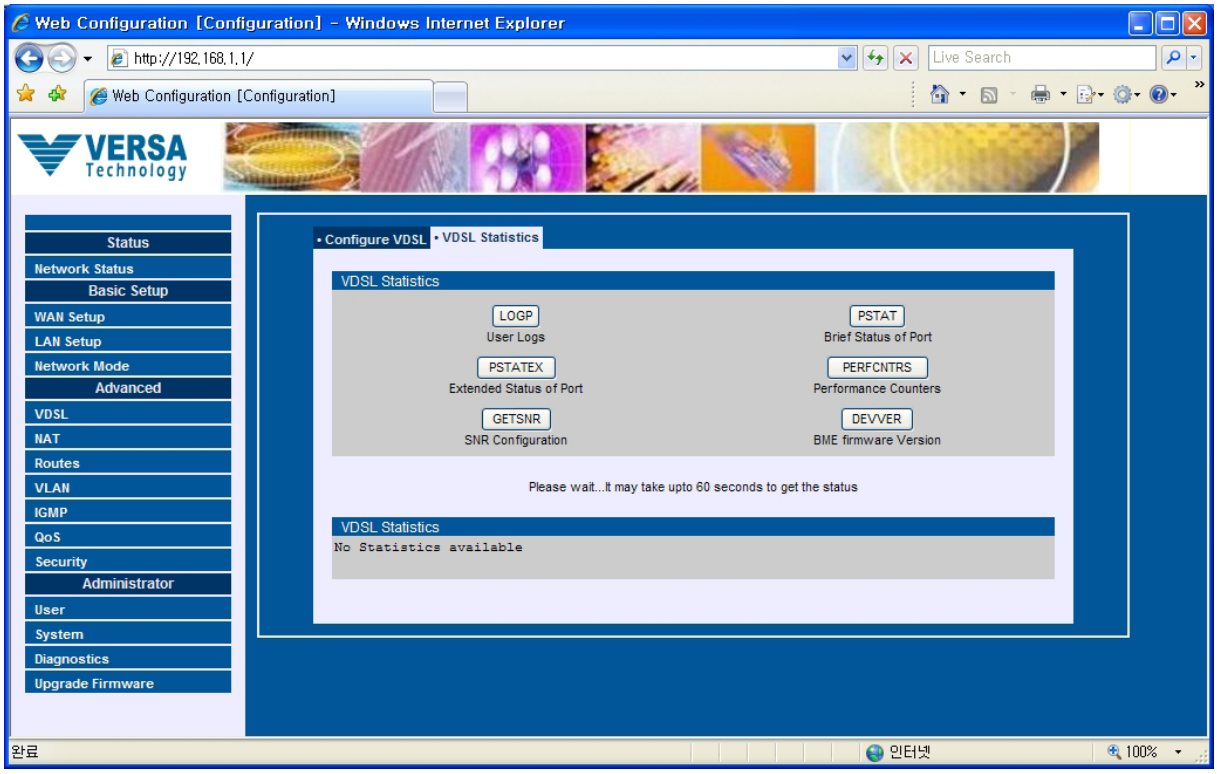

Figure 12 VDSL Statistics

This window provides VDSL Statistics information.

- LOGP : Show User Logs
- PPROV : Show brief status of port
- CLRCNTR : Show extended status of port
- LOGC : Show performance counters
- GETSNR : Show SNR(Signal to Noise Ratio) configuration
- DEVVER : Show BME(Burst Mode Engine) firmware version

Advanced

└NAT ► NAT

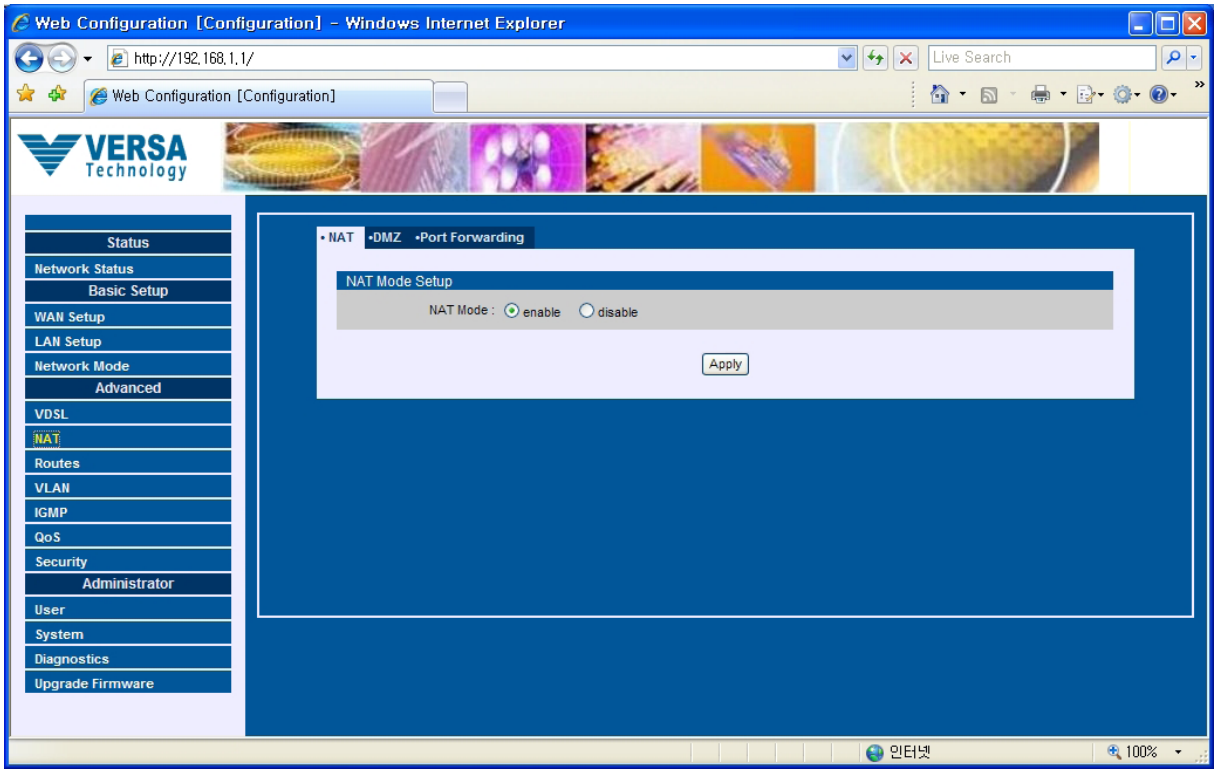

Figure 13 NAT Mode Setup

This window provides NAT mode setup.
If you want to enable or disable NAT Mode, perform the following steps:

- Select the NAT Mode enable or disable button.
- Click the “Apply” button.

Advanced

└NAT ► DMZ

This window provides DMZ setup and internal server setup. The DMZ setup box allows one local PC to be exposed to the Internet for use of a special-purpose service such as web server, ftp server and so on. DMZ hosting forwards all the ports for one PC at the same time.

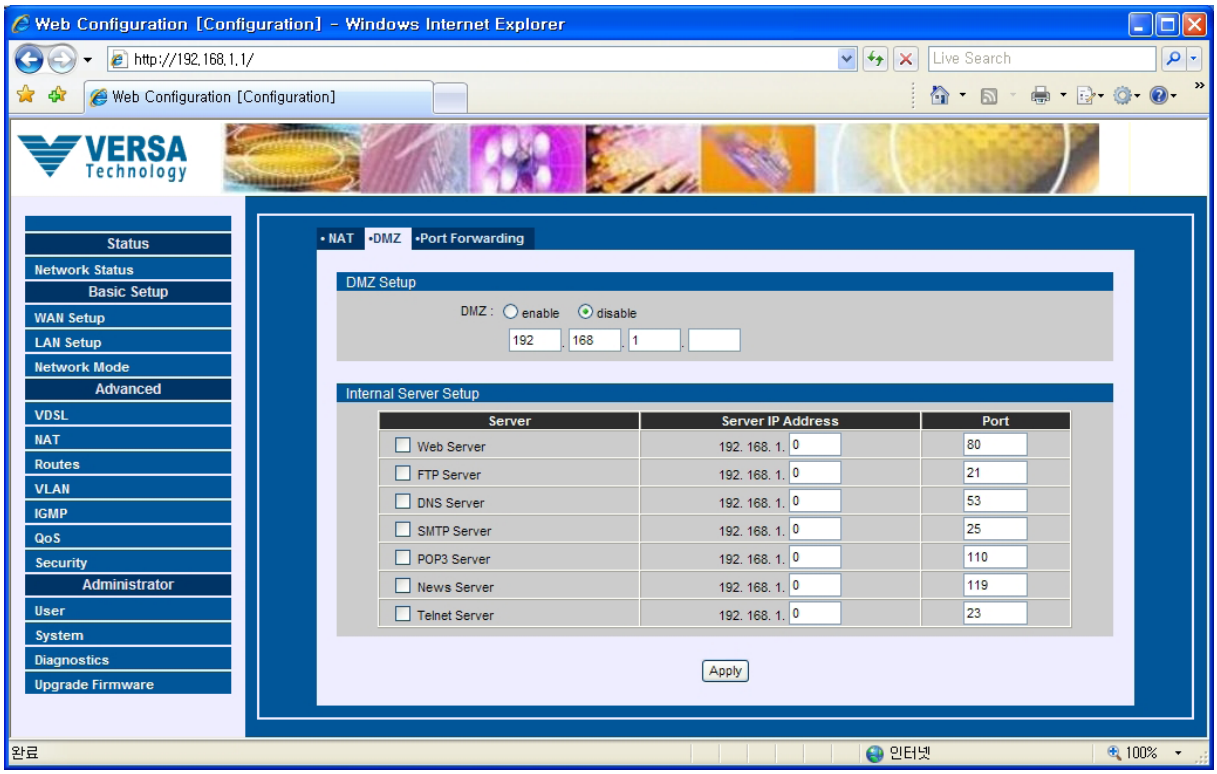

Figure 14 DMZ Setup

If you want to setup the DMZ server, perform the following steps:

- Select DMZ enable button.
- Enter DMZ host PC IP address.
- Click the “Apply” button.

The Internal server setup box allows specifying PC to use special-purpose server such as web server, ftp server and so on. It will forward the entire packet to the PC.

If you want to set internal server, perform the following steps:

- Select Server check box.
- Enter DMZ host PC IP address.
- Enter Port number.
- Click the “Apply” button.

Advanced

└NAT ► Port Forwarding

This window provides port forwarding information and shows a list of port forwarding entries.

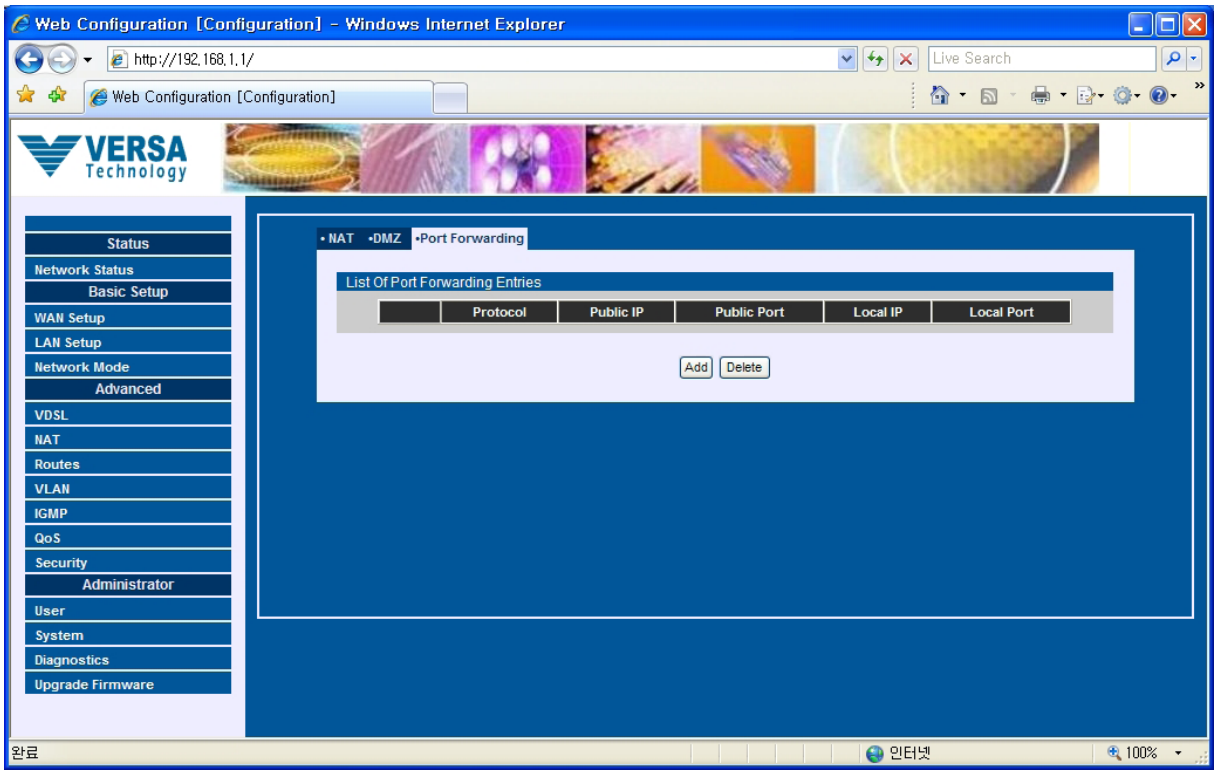

Figure 15 Port Forwarding Setup

If you want to add new port forwarding entry,. Click the “Add” button.
Then “Port Forwarding Add” window will be displayed.

If you want to delete port forwarding entries, perform the following steps:

- Select port forwarding entry to delete.
- Click the “Delete” button.

Advanced

└NAT ► Port Forwarding ► Add

This window provides port forwarding setup.

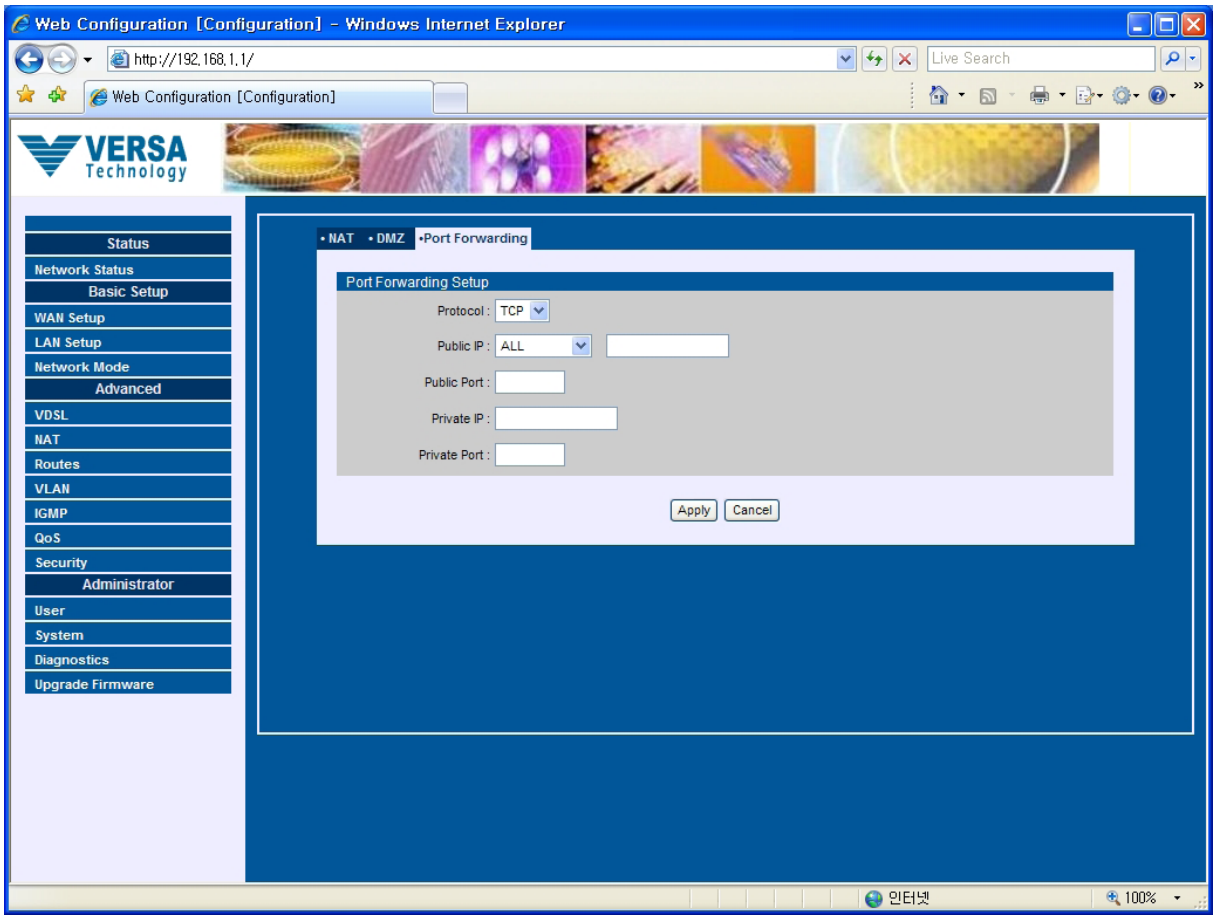

Figure 16 Port Forwarding Add

If you want to add new port forwarding entry, perform the following steps:

- Select protocol type. You can select 'TCP' or 'UDP' protocol type using dropdown combo-box
- Select public IP address type. You can select 'All' or 'Specified IP'.
  If you select 'Specified IP', enter IP address from WAN.
- Enter public port number.
- Enter private IP address.
- Enter private port number.
- Click the "Apply" button.

Advanced

└ Routes

This window provides Routing information and setup.

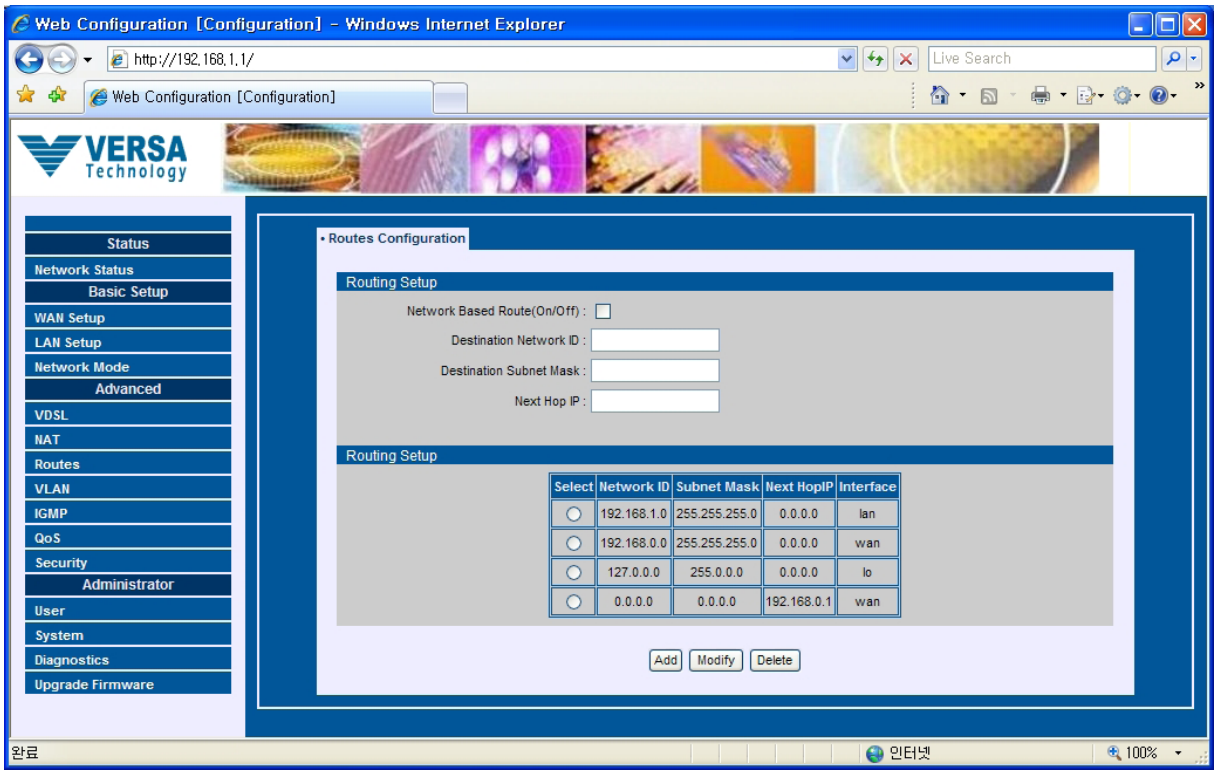

Figure 17 Routes Setup

If you want to add new route, perform the following steps:

- Check network based route on or off
- Enter destination network ID.
- Enter destination subnet mask.
- Enter next hop IP address
- Click the “Add” button.

If you want to modify an existing route entry, perform the following steps:

- Select routing entry.
- Check network based route on or off
- Modify destination network ID.
- Modify destination subnet mask.
- Modify next hop IP address
- Click the “Modify” button.

If you want to delete a route entry, perform the following steps:

- Select routing entry.
- Click the “Delete” button.

Advanced

└VLAN

This window provides VLAN Setup.

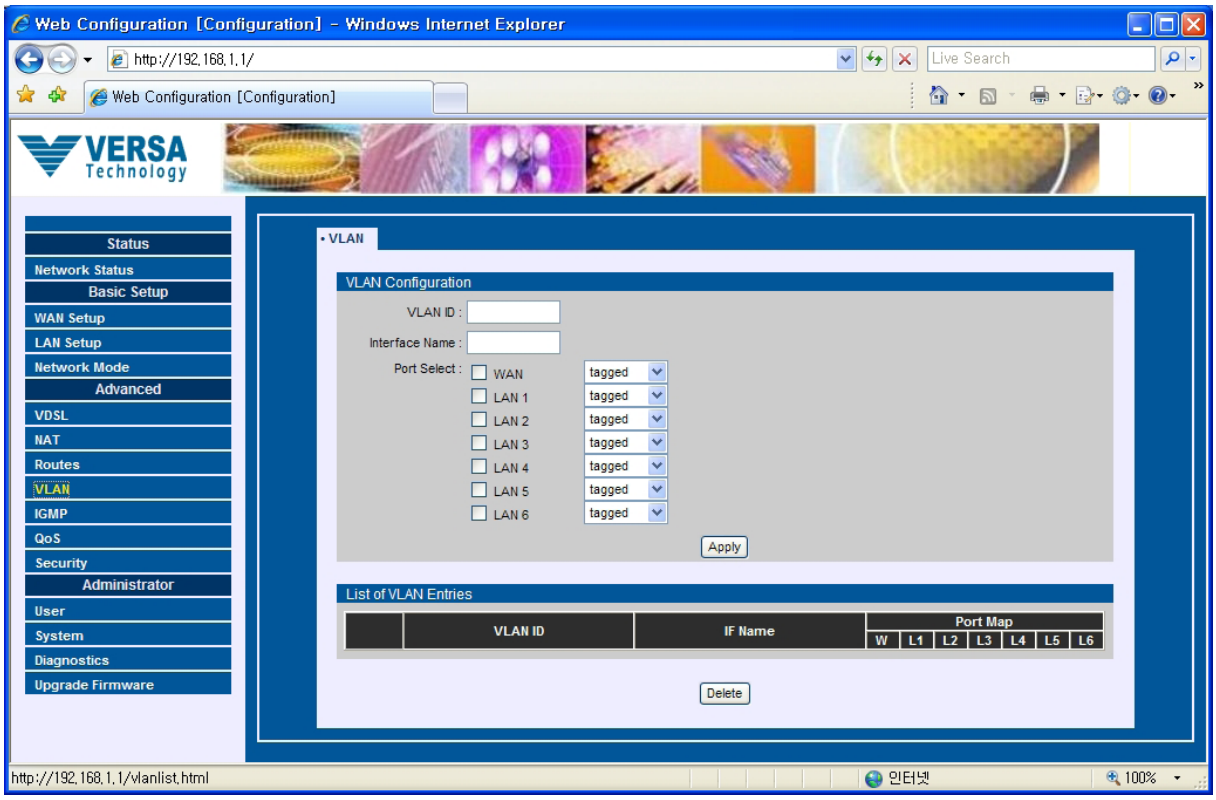

Figure 18 VLAN Setup

If you want to add new VLAN entry, perform the following steps:

- Enter VLAN ID.
- Enter interface name.
- Select Ports. You can also select tagged or untagged VLAN using dropdown combo-box.
- Click the “Apply” button.

If you want to delete VLAN entry, perform the following steps:

- Select VLAN entry.
- Click the “Delete” button.

Advanced

└IGMP

This window provides IGMP Information. IGMP Status box shows the status of IGMP.

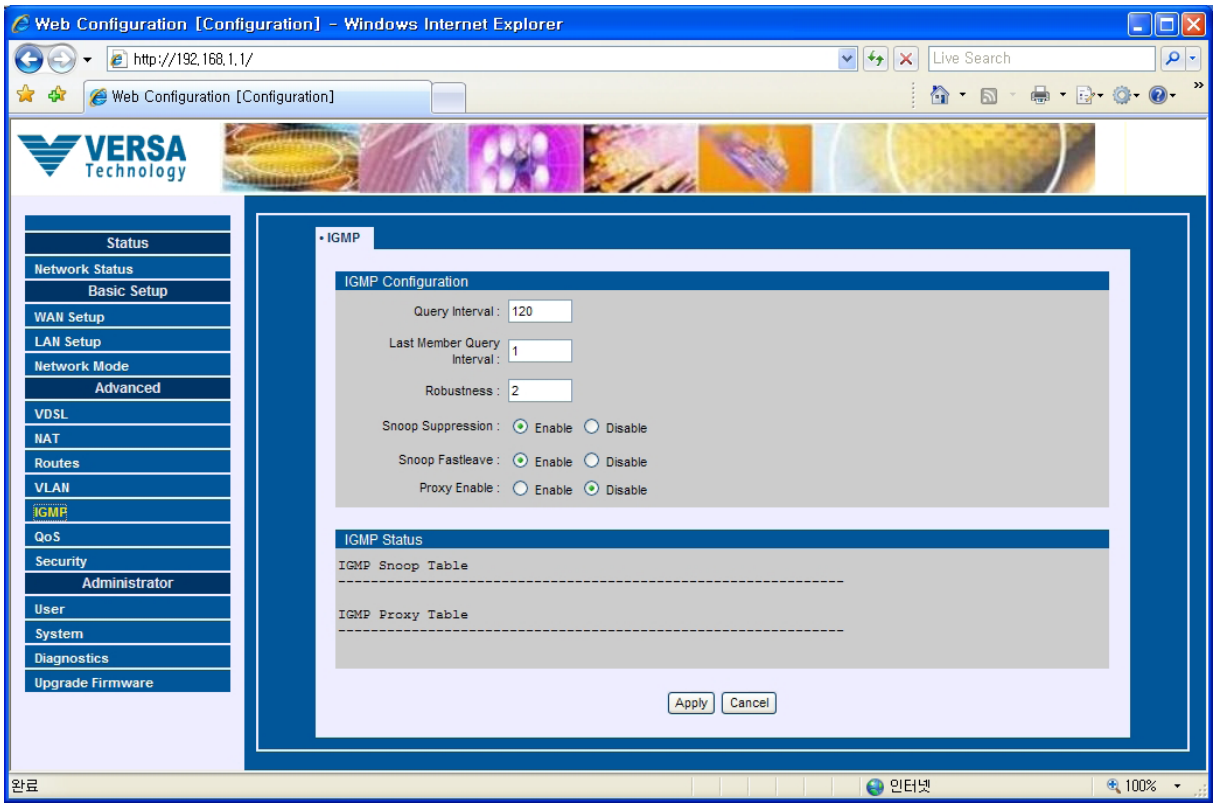

Figure 19 IGMP Setup

If you want to change the IGMP configuration, perform the following steps:

- Enter Query Interval value.
- Enter Last Member Query Interval value.
- Enter Robustness value.
- Select Snoop Suppression enable or disable.
- Select Fastleave enable or disable.
- Select IGMP Proxy enable or disable.
- Click the “Apply” button.

Advanced

└QoS ► QoS Configuration

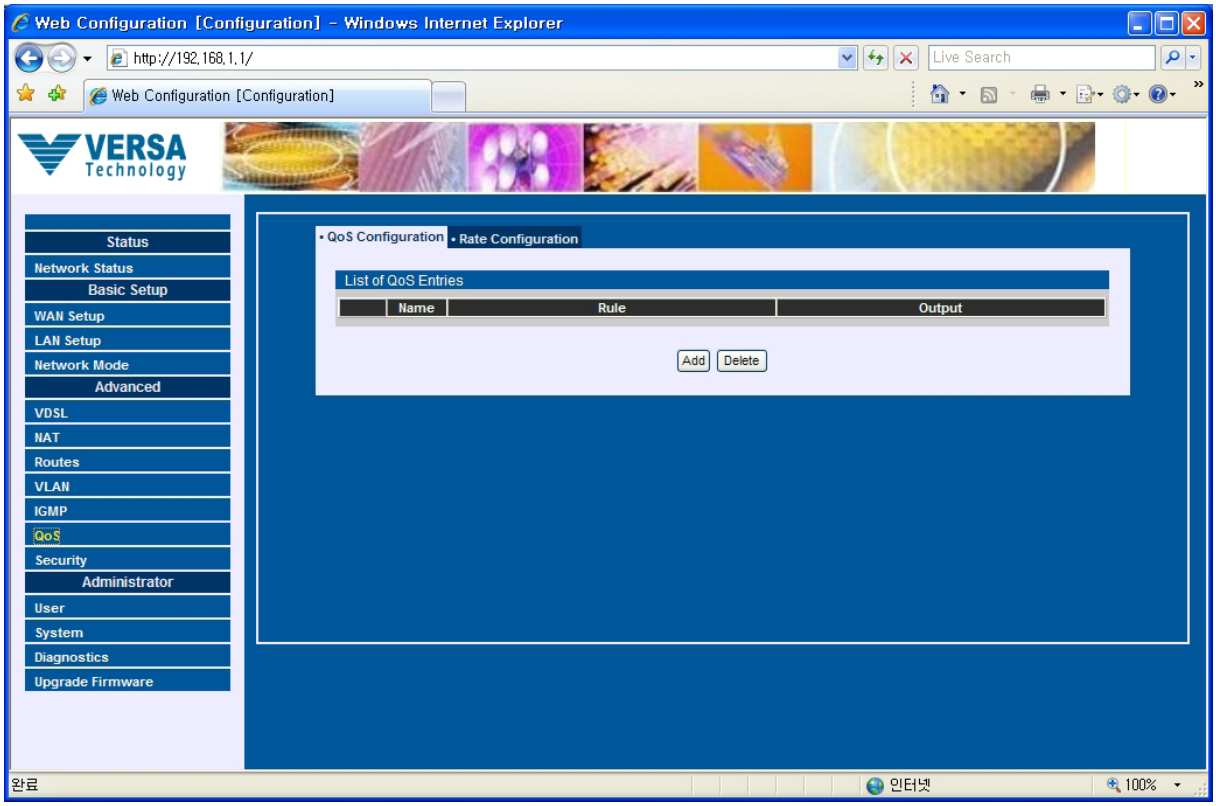

Figure 20 QoS Setup

If you want to add new QoS entry,. Click the “Add” button, then when “QoS Configuration” window is displayed, perform the following steps:

- Select QoS entry to delete.
- Click the “Delete” button.

Advanced

└ QoS ► QoS Configuration ► Add

This window displays QoS configuration setup. You can select multiple input and output items for each QoS rule.

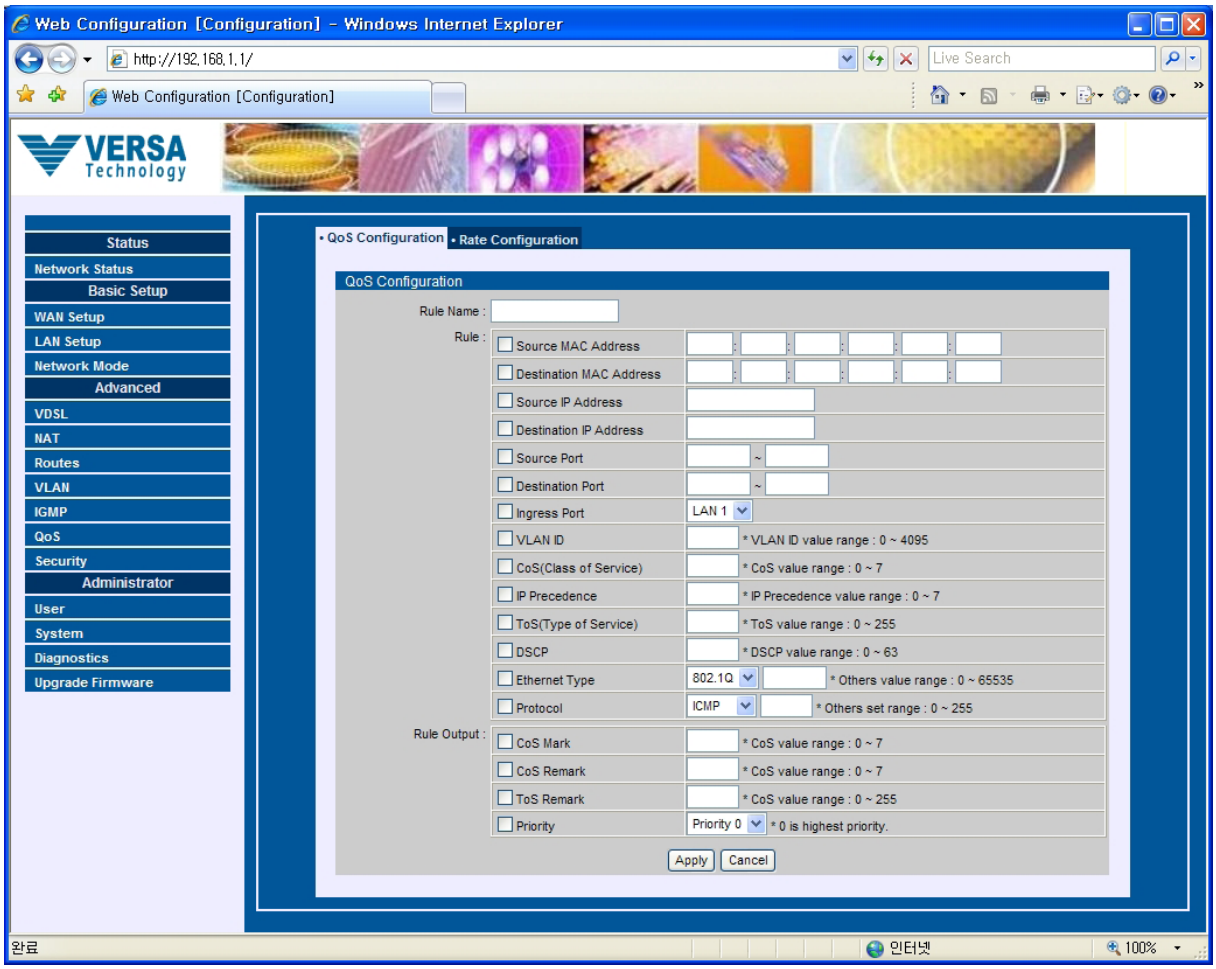

Figure 21 QoS Configuration

For example, if you want to make the rule for the source IP address and VLAN ID, check “Source IP Address” and “VLAN ID” and enter the value what you want to include.

And if you want to configure rates like SPQ and DWRR, check “Priority” check box in “Rule Output” table and select priority 0 to 3. The priority corresponds with queue in rate configuration. That means if you want to queue target packet to “Queue 0”, you need to select “Priority 0”.

If you want to add new QoS rule, perform the following steps:

- Enter rule name.
- Select all rules in “Rule” table and enter the value.
- Select all rule output in “Rule Output” table and enter the value.
- Click the “Apply” button.

Advanced

└ QoS ► Rate Configuration

This window provides rate configuration and information. Rate Status box shows the rate status of all ports such as rate for queue 0 to 3, ingress rate, egress rate and shaping rate.

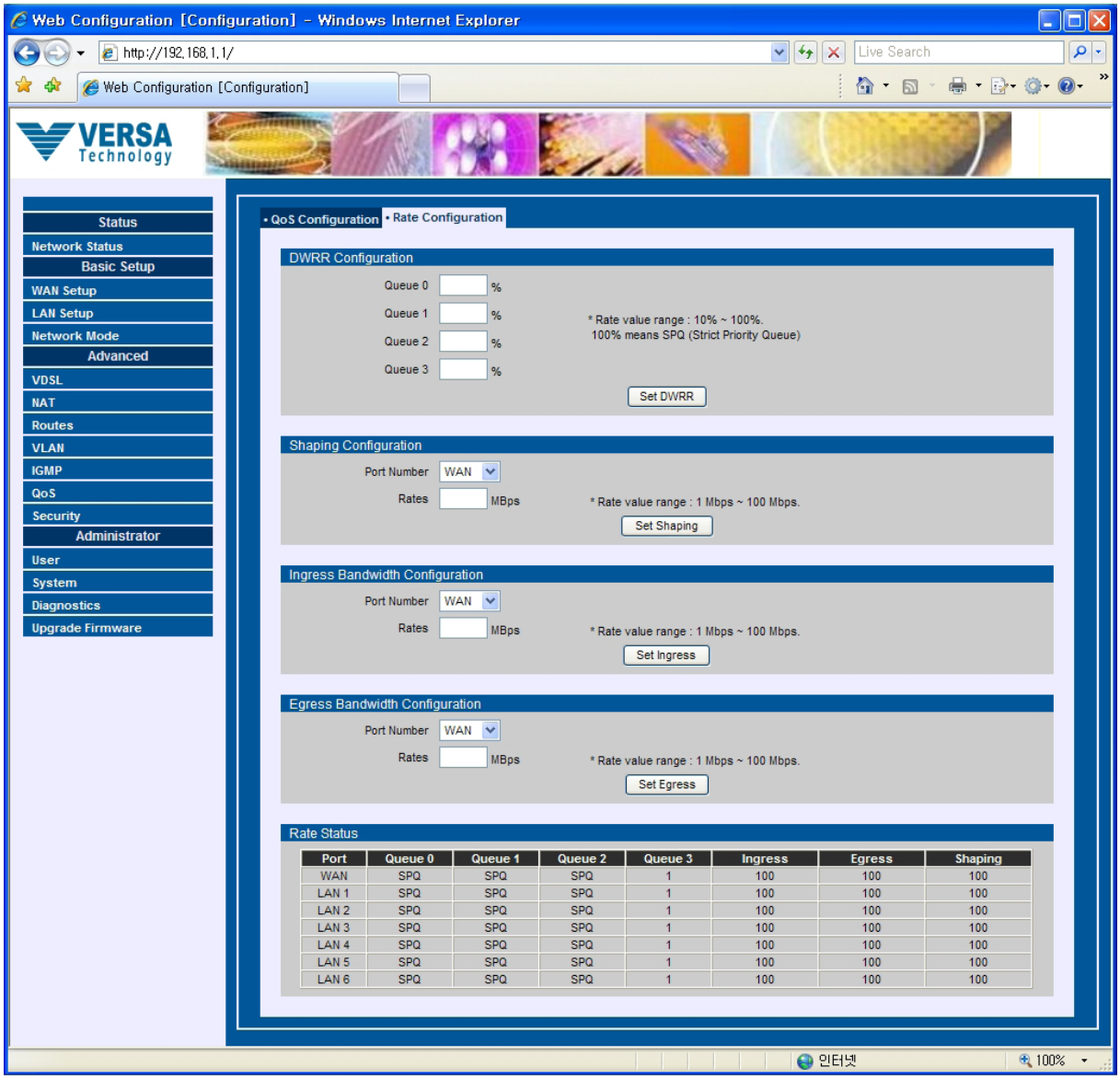

Figure 22 Rate Configuration

If you want to set DWRR configuration, perform the following steps:

- You need to classify packets and set queue number using QoS rule.
- Enter rate value for Queue 0 to 3.
  If you enter 100% of rate value, it means SPQ.
- Click the “Set DWRR” button.

If you want to set Shaping configuration, perform the following steps:

- Select physical port from “Port Number” dropdown combo-box.
- Enter Rate for selected physical port.
- Click the “Set Shaping” button.

If you want to set Ingress bandwidth configuration, perform the following steps:

- Select physical port from “Port Number” dropdown combo-box.
- Enter Rate for selected physical port.
- Click the “Set Ingress” button.

If you want to set Egress configuration, perform the following steps:

- Select physical port from “Port Number” dropdown combo-box.
- Enter Rate for selected physical port.
- Click the “Set Egress” button.

Advanced

└ Security ► Security Configuration

This window provides security information and shows list of security entries.

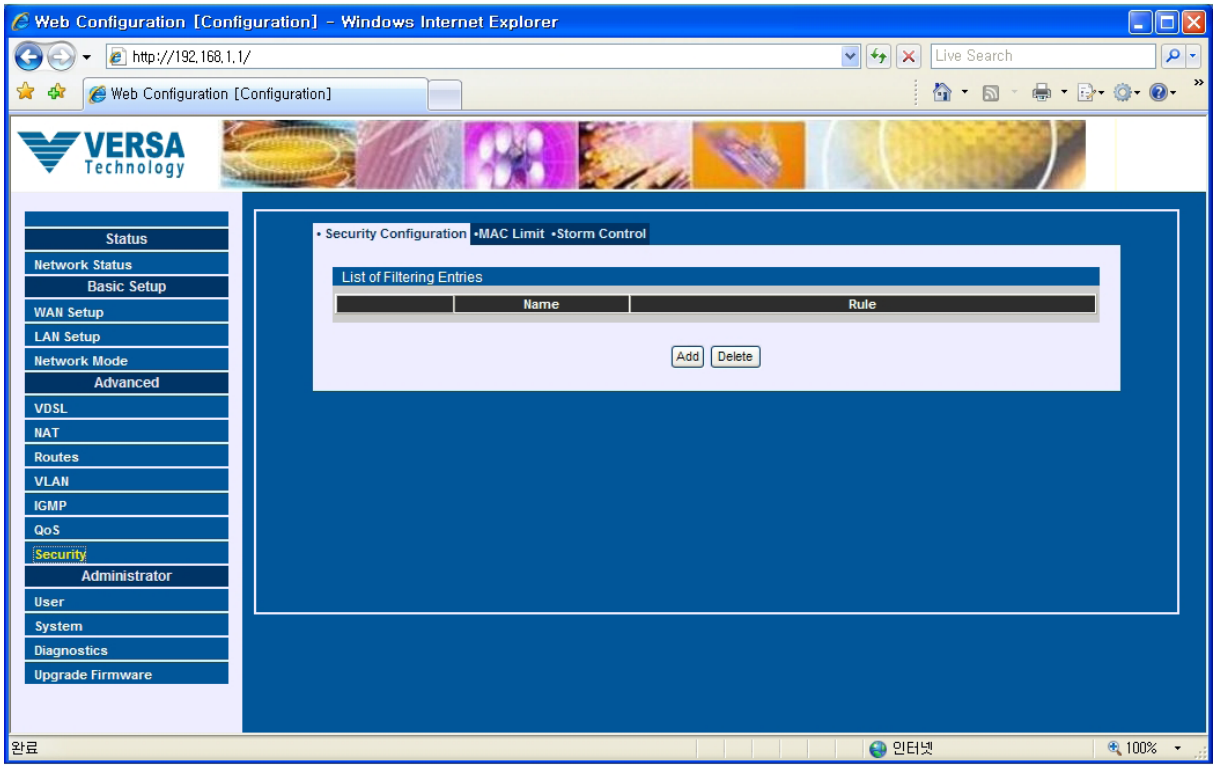

Figure 23 Security Setup

If you want to add new security entry,. Click the “Add” button. Then the “Security Configuration” window will be displayed.

If you want to delete security entries, perform the following steps:

- Select security entry to delete.
- Click the “Delete” button.

Advanced

└ Security ► Security Configuration ► Add

This window provides security setup; you can select multiple security rule items for a single security rule.

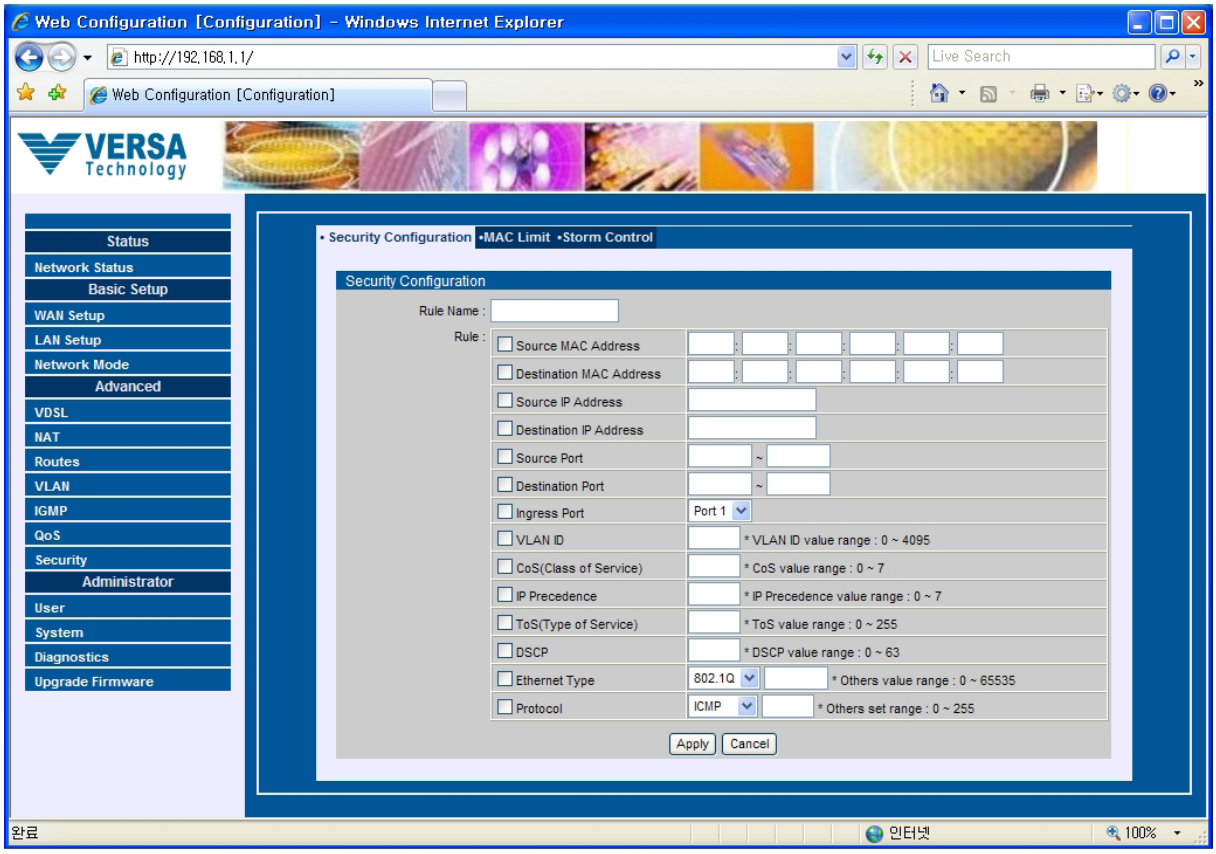

Figure 24 Security Configuration

For example, if you want to make the rule for destination port number and source MAC address, check “Destination Port” and “Source MAC Address” and enter the value what you want to include.

If you want to add new QoS rule, perform the following steps:

- Enter rule name.
- Select all rules in “Rule” table and enter the value.
- Click the “Apply” button.

Advanced

└ Security ► MAC Limit

This window provides MAC Limit configuration.

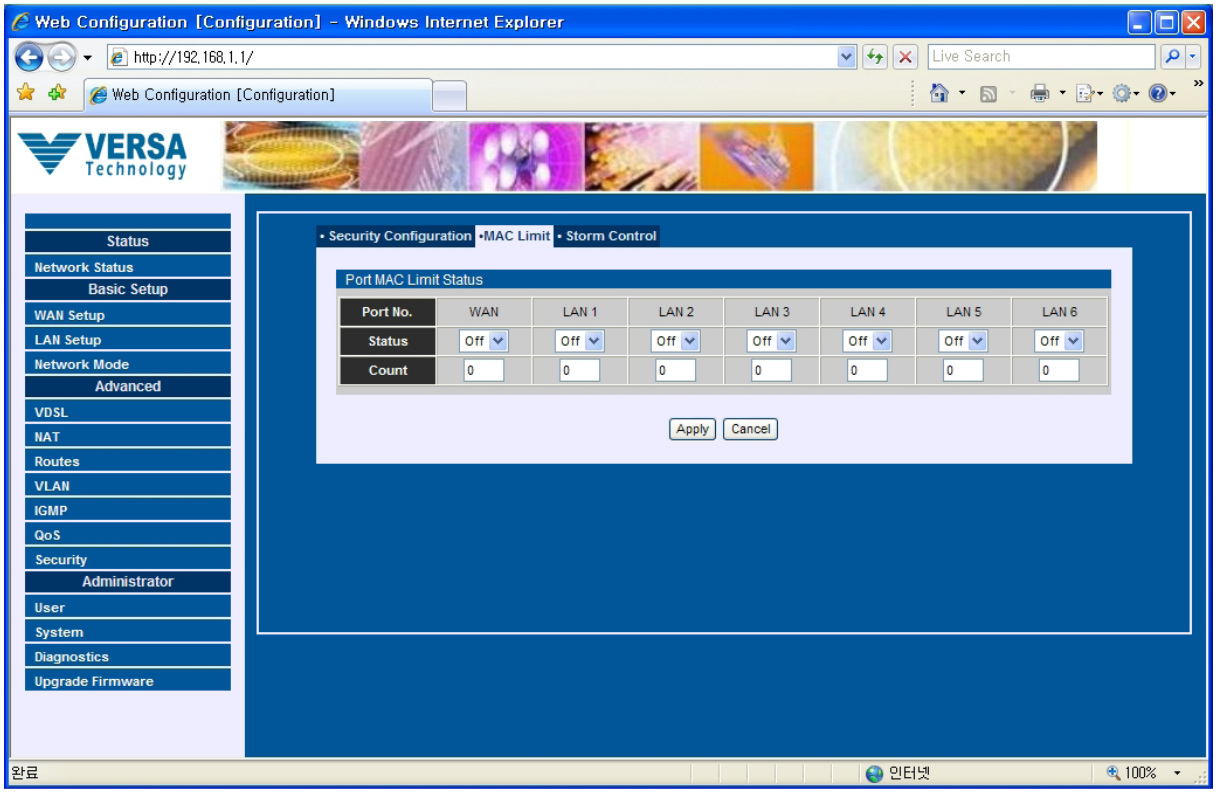

Figure 25 MAC Limit Setup

If you want to set a MAC limit, perform the following steps:

- Select MAC limit status on or off for each port.
- Enter MAC limit count 0 to 4.
  0 means no limit.
  1~4 means only entered MAC address allowed to pass the port.
- Click the “Apply” button.

Advanced

└ Security ► Storm Control

This window provides storm control configuration.

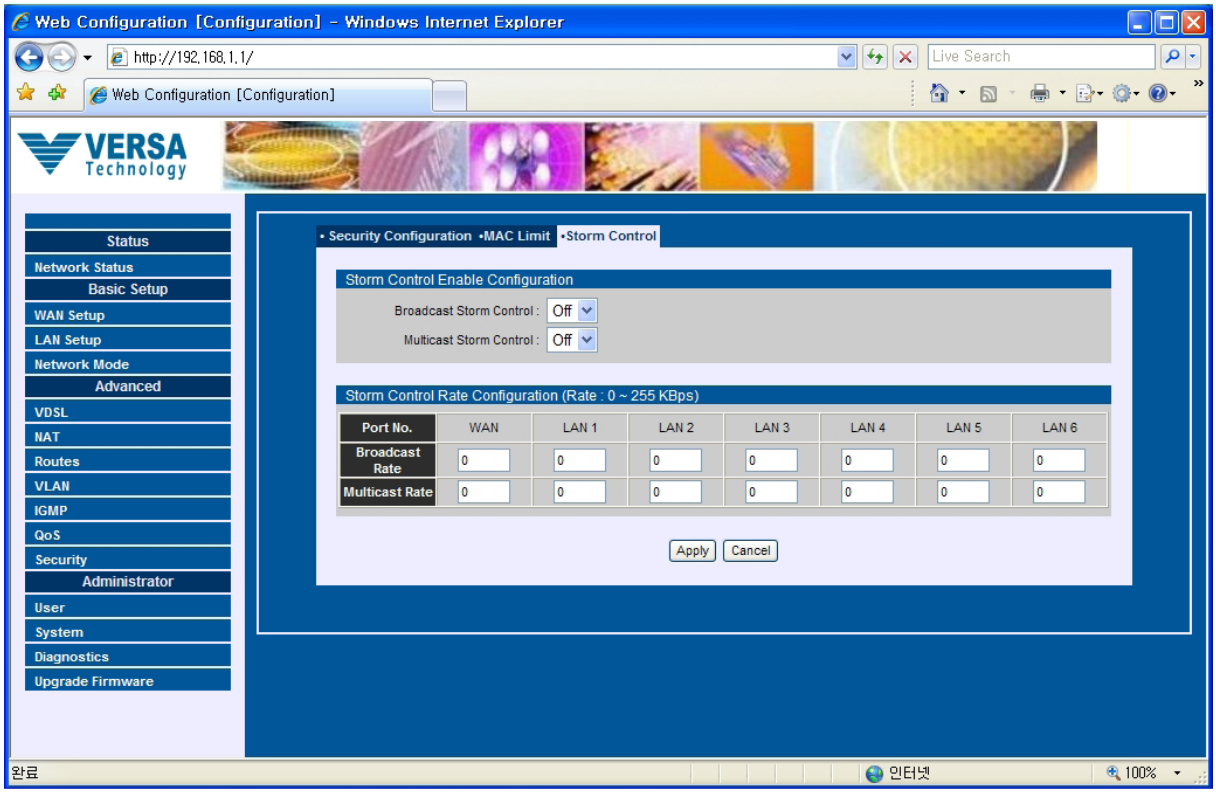

Figure 26 Storm control Setup

If you want to set storm control, perform the following steps:

- Select broadcast storm control on or off.
- Select multicast storm control on or off.
- Enter broadcast rate for each port.
- Enter multicast rate for each port.
- Click the “Apply” button.

Administrator

└ User

This window provides user management

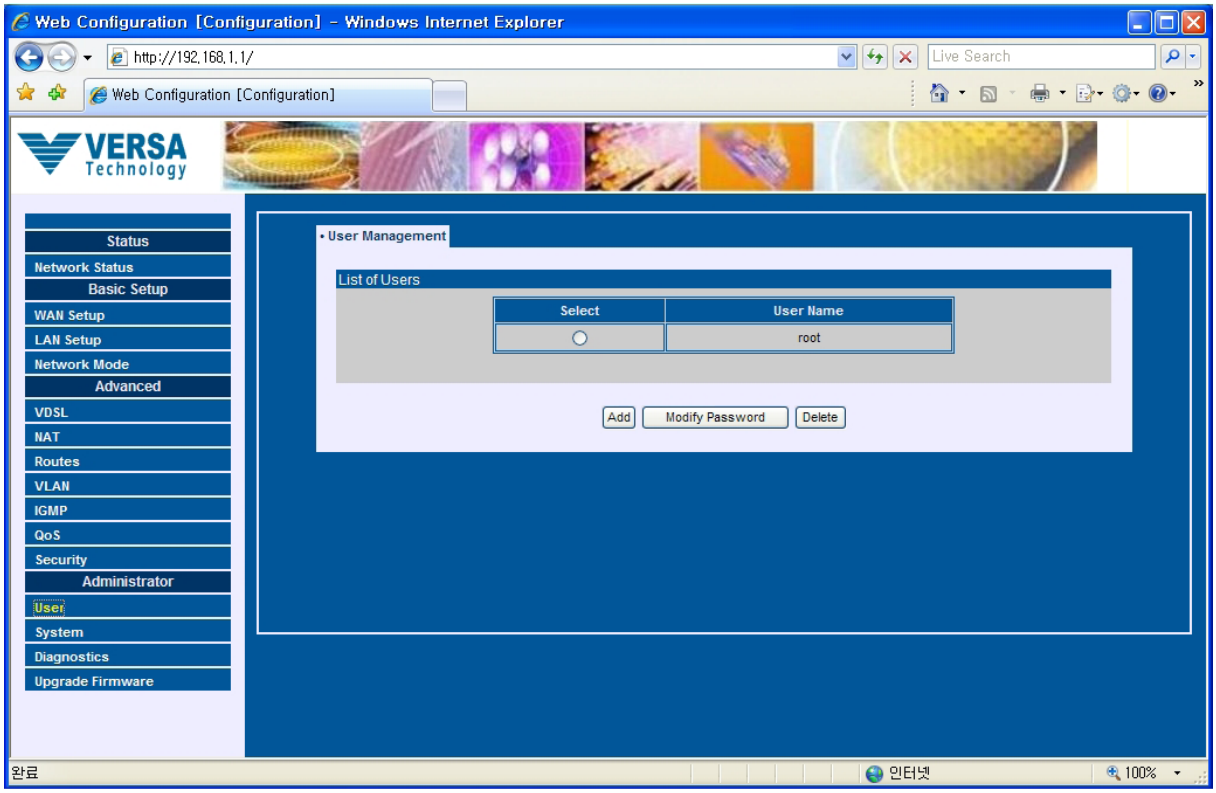

Figure 27 User Management

You can add and delete user.

You can also modify user password.

Administrator

└ System

This window provides system management

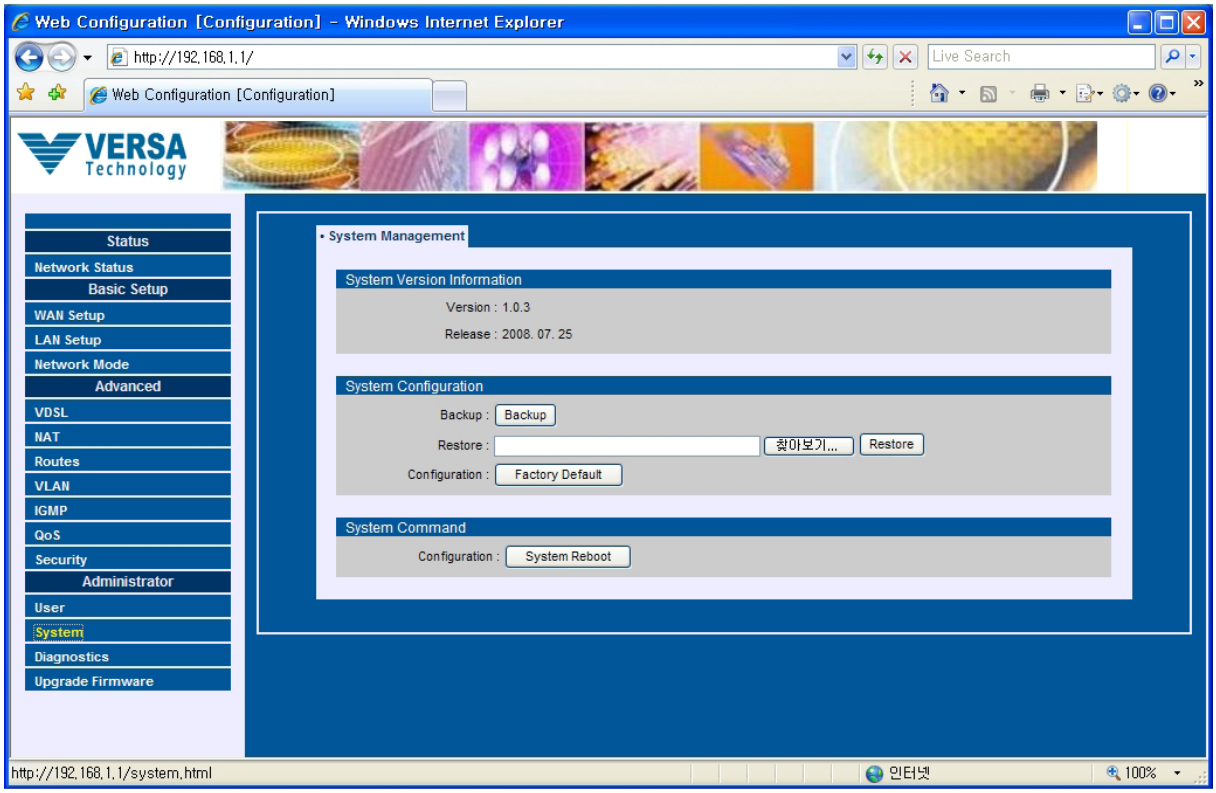

Figure 28 System Management

You can backup or restore system configuration and reset system configuration to factory default.

When you click “System Reboot” button, system will reboot immediately.

Administrator

└ Diagnostics

This window provides ping check

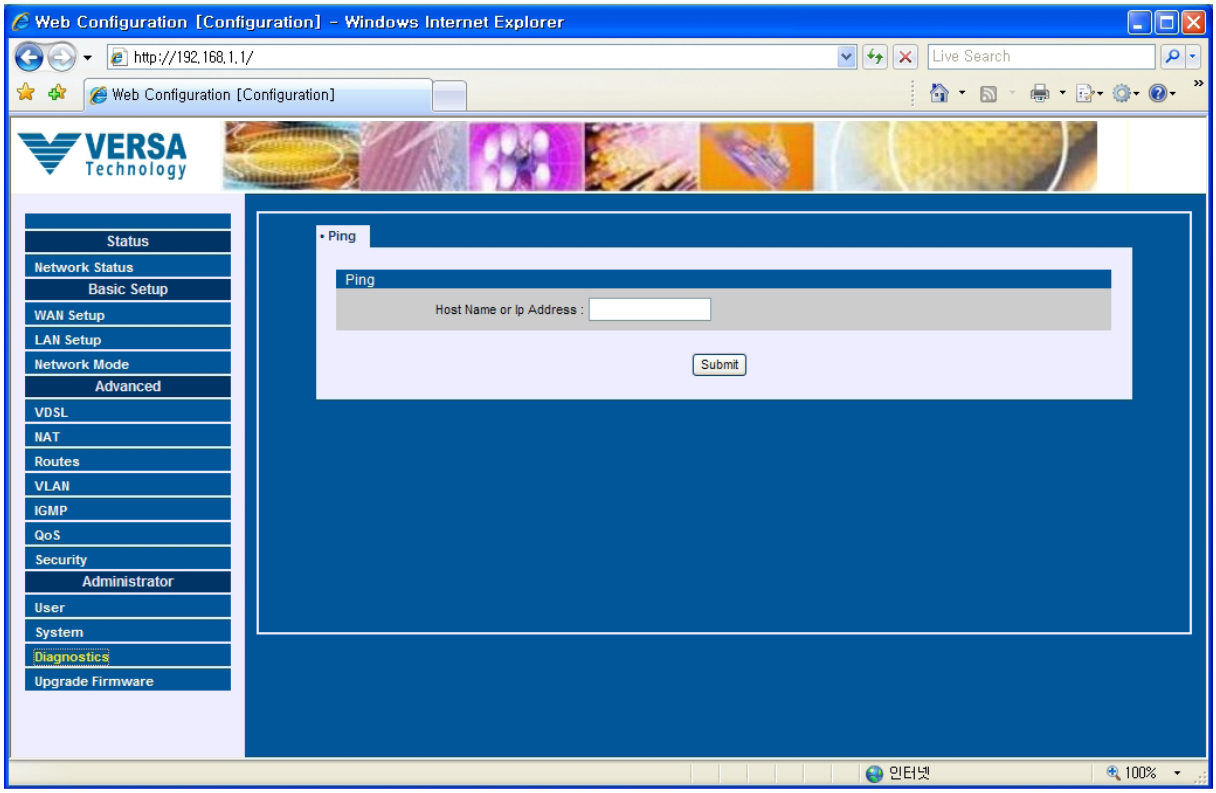

Figure 29 Ping

If you want to test ping, perform the following steps:

- Enter target host name or IP address.
- Click “Submit” button.

Administrator

└ Upgrade Firmware

This window provides system firmware upgrade

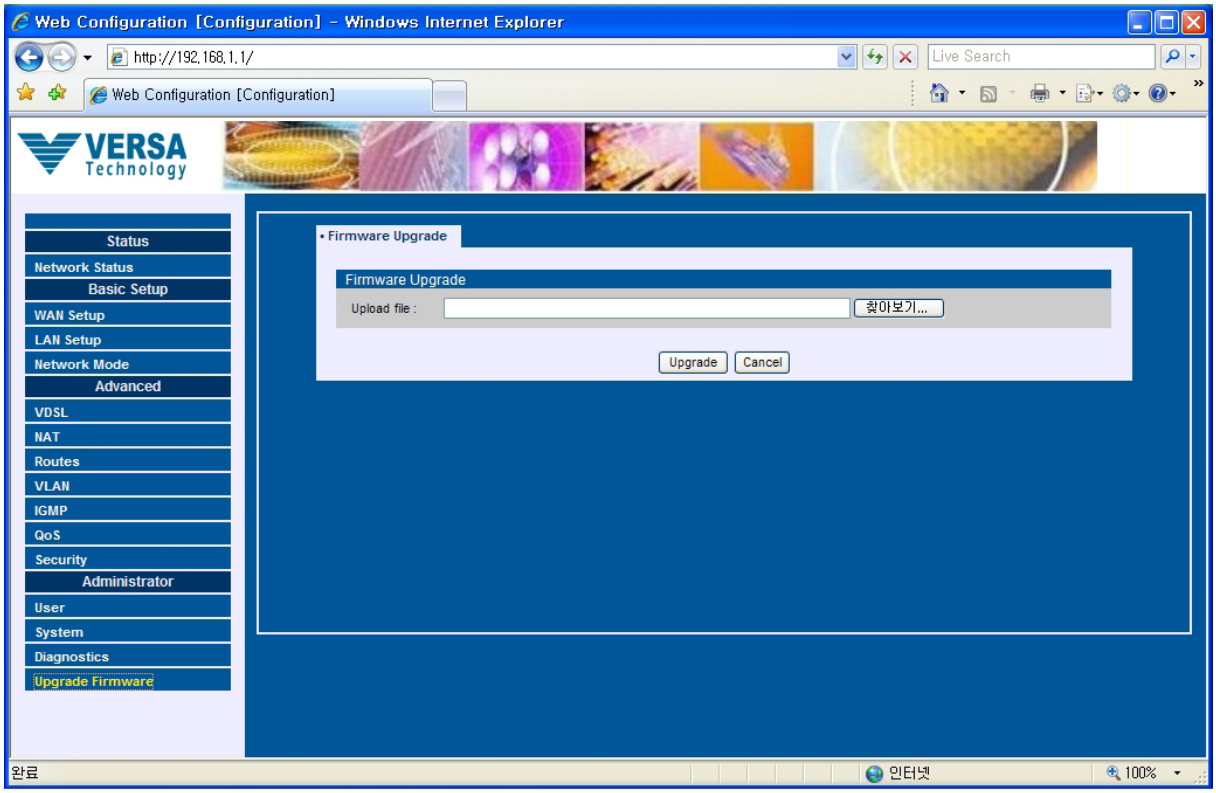

Figure 30 Firmware upgrade

If you want to upgrade system firmware, perform the following steps:

- Choose target firmware file.
- Click “Upgrade” button.